AUDIO SWITCHING BOARD KIT FOR ENOVA DGX 6400

DGX6400-ASB (FG1061-764)

Overview

The DGX6400-ASB is two pairs of audio switching boards that include two Input and two Output boards for the Enova DGX 6400.The boards enable a host of audio switching capabilities including Audio Breakaway and Downmixing. DSP functionality includes a 10 Band Parametric EQ on every output which allows audio tuning for each specific environment based on its acoustics. The Enova DGX Web Configuration interface makes it simple and easy to set up these audio features with the Enova DGX. It includes a test tone generator that allows testing of every audio connection without the need for a separate audio source. The Audio Switching Boards are only sold in pairs and must be used together.

Specifications

GENERAL	
Compatible ENOVA DGX Systems	Enova DGX 6400
Compatible Enova DGX I/O Boards	DGX-I-HDMI, Enova DGX HDMI Input Board (FG1058-540) •DGX-O-HDMI, Enova DGX HDMI Output Board (FG1058-550) •DGX-I-DVI, Enova DGX DVI Input Board (FG1058-600) •DGX-O-DVI, Enova DGX DVI Output Board (FG1058-610) •DGX-I-DXL, Enova DGX DXLink Twisted Pair Input Board (FG1058-570) •DGX-O-DXL, Enova DGX DXLink Twisted Pair Output Board (FG1058-580) •DGX-I-DXF-MMD, Enova DGX DXLink Multimode Fiber Input Board, Duplex (FG1058-622)

	•DGX-O-DXF-MMD, Enova DGX DXLink Multimode Fiber Output Board, Duplex (FG1058-632) •DGX-I-DXF-MMS, Enova DGX DXLink Multimode Fiber Input Board, Simplex (FG1058-623) •DGX-O-DXF-MMS, Enova DGX DXLink Multimode Fiber Output Board, Simplex (FG1058-633) •DGX-I-DXF-SMD, Enova DGX DXLink Single Mode Fiber Input Board, Duplex (FG1058-620) •DGX-O-DXF-SMD, Enova DGX DXLink Single Mode Fiber Output Board, Duplex (FG1058-630) •DGX-I-DXF-SMS, Enova DGX DXLink Single Mode Fiber Input Board, Simplex (FG1058-621) •DGX-O-DXF-SMS, Enova DGX DXLink Single Mode Fiber Output Board, Simplex (FG1058-631)

AUDIO SWITCHING	
Audio Switching	80x80 Matrix Audio Switching. Each of the embedded or auxiliary analog audio outputs has independent volume, EQ and sync delay

AUDIO INPUTS	
Auxiliary Analog Audio Input Connections	(8 – 4 per board) 3.5 mm 10-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended) stereo audio
64 Embedded digital audio inputs from video input positions	(Embedded audio must originate as a 2 channel PCM) Applies to embedded audio inputs on Enova DGX Input Boards for positions 1-64
16 Auxiliary audio inputs on the Input Board of the Audio Switching Board Kit	Audio inputs 65-80

AUDIO OUTPUTS	
Auxiliary Analog Audio Output Connections	(8 – 4 per board) 3.5 mm 10-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended) stereo audio
64 Embedded digital audio to video outputs	Applies to embedded audio outputs on Enova DGX Output Boards for positions 1-64
16 Auxiliary audio outputs on the Output Board of the Audio Switching Board Kit	Audio outputs 65-80

AUDIO ADJUSTMENTS PER INPUT (EMBEDDED VIDEO AND AUXILIARY INPUTS)	
Audio Input Compression	• Independent Compression per input • Attack: 1 to 2000 ms • Release: 10 to 5000 ms • Compression Ratio: 1 to 20 • Threshold: -60 to 0 dB
Audio Input Gain Compensation	-24 dB to +24 dB, 1 dB steps

AUDIO ADJUSTMENTS PER OUTPUT (EMBEDDED VIDEO AND AUXILIARY OUTPUTS)	
Audio Output Compression	• 10-band parametric EQ with variable center frequency, filter type and Q per band • Center Frequency: 20 Hz to 20 kHz • EQ Gain: -12 to +12 dB • Q: 0.1 to 20 • Filter Types: Bell, Base Shelving, Treble Shelving, Low Pass, High Pass, Band Pass, Band Stop
Audio Output Sync Delay	0 to 200 ms
Balance Control	20 steps each left and right
Audio Control per Output	Independent EQ, Volume and Balance control per output
Test Tone Generator	Single selection of test tone type available on all outputs simultaneously. Individually enabled/disabled per output – 60 Hz, 250 Hz, 400 Hz, 1 kHz, 3,Hz, 5 kHz, 10 kHz, Pink Noise, White Noise

AUXILIARY ANALOG AUDIO INPUTS	
Input Level (Nominal)	+4 dBu (1.228 Vrms) balanced or -10 dBV (0.3162 Vrms) unbalanced
Input Level (Maximum)	+14 dBu
Input Impedance	>17 kOhms balanced, >10 kOhms unbalanced
Audio Channel Crosstalk	Balanced Line Inputs: -98 dB @ 0 dBV, 20 Hz to 20 kHz, Unbalanced Line Inputs: -70 dB @0 dBV, 20 Hz to 20 kHz

AUXILIARY ANALOG AUDIO OUTPUTS	
Output Level (Maximum)	+17 dBu
Output Impedance	200 Ohms (line level)
Audio Frequency Response	Line: 20 Hz to 20 KHz +/-0.1 dB
Audio S/N Ratio	Line: 105 dB @ 10 dBV, AES17
Audio THD+N	Line: 0.003% @ 0 dBV, 1 kHz

DOWN-MIX	
Down-mix input	Down-mix input fed from selectable embedded audio input from any Enova DGX Input Board. Down-mixed audio switchable to all embedded/auxiliary audio outputs. +17 dBu
Down-mix input format support	Dolby TrueHD, Dolby Digital, DTS-HD Master Audio, DTS, 2 CH through 8 CH L-PCM